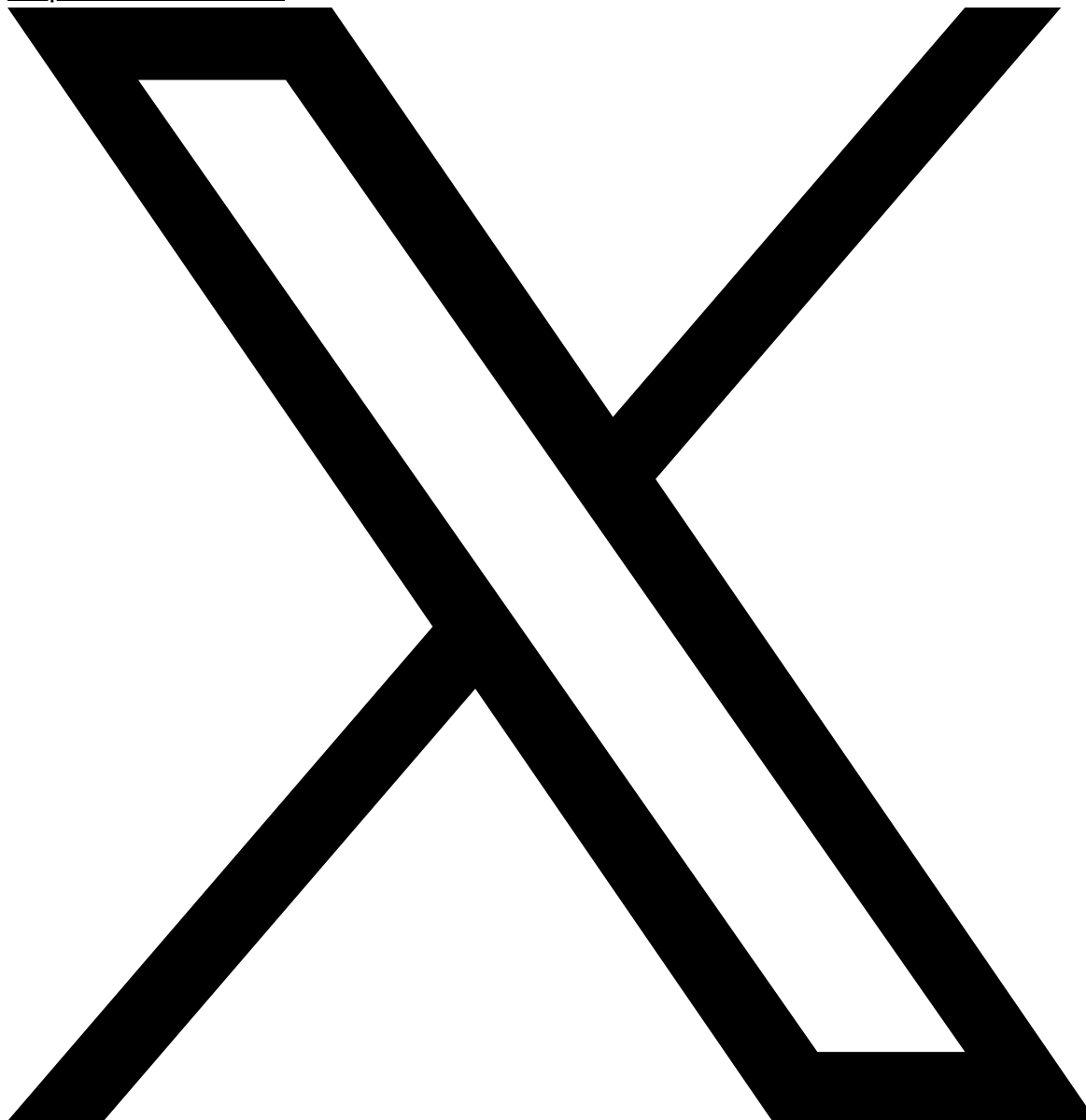



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Account Recommendations

Followers are people who receive your Posts. Following someone on X means: you are subscribing to their posts as a follower; their updates will appear in your [Home timeline](https://help.x.com/using-x/x-timeline) (<https://help.x.com/using-x/x-timeline>); and that person is able to send you [Direct Messages](https://help.x.com/using-x/direct-messages) (<https://help.x.com/using-x/direct-messages>). To improve your experience with our platform, our Account Recommendation or 'Who to Follow' service may recommend accounts we think you may be interested in.

How does X find accounts to follow

Our account suggestions are based on algorithms that make personalized suggestions for you.

How does X decide which accounts to recommend to you

You may see suggestions based on criterion such as:

- If you've uploaded your contacts to X, we'll suggest you connect with those who already have X accounts.
- If someone has uploaded their contacts to X, and your email address or phone number is included in their contacts, we may suggest you follow them.
- We may also make suggestions based on your location, such as the city or country you are in.
- We may make suggestions based on your activity on X, such as your likes or reposts, who you follow, and accounts and posts that you view or otherwise interact with.
- Recommendations delivered to you via email or through X will not suggest content that includes your muted words and hashtags. (Learn more, [here](https://help.x.com/using-x/advanced-x-mute-options) (<https://help.x.com/using-x/advanced-x-mute-options>).)

How you can influence the accounts you see

You can control whether we will suggest your account to someone else who has your email address or phone number in their contacts by adjusting your privacy settings. For more information and instructions about adjusting your settings, read [this article](https://help.x.com/safety-and-security/email-and-phone-discoverability-settings) (<https://help.x.com/safety-and-security/email-and-phone-discoverability-settings>).

When you upload your contacts to X, these contacts may appear as suggested accounts for you to follow. Conversely, your account may appear as a suggestion for others to follow. You can control whether X will use your address book to suggest your account to others by adjusting the privacy settings that let others find you by your email address or phone number.

You can also remove contacts you've previously uploaded. When you remove previously uploaded contacts, we will no longer make suggestions based on those contacts, but we may make similar suggestions based on who you already follow, and other factors. For more information and instructions for removing previously imported contacts, see this article.

X has also designed tools that help you control all content that you see across the platform and to protect you from content you consider harmful. (Learn more, [here](https://help.x.com/safety-and-security/control-your-x-experience) (<https://help.x.com/safety-and-security/control-your-x-experience>).)

How you can see non-personalized suggestions

European Union users can see non-personalized account suggestions in our "Who to Follow", "You might like", and "What's happening" modules.

More information

For a more detailed view of how our Account Recommendation system works, please see:

- An overview from our engineering team below;
- Our About Account Suggestions help center article, [here](https://help.x.com/using-x/account-suggestions) (<https://help.x.com/using-x/account-suggestions>); Or
- Our source code, which is available, [here](https://github.com/twitter/the-algorithm/tree/main/follow-recommendations-service) (<https://github.com/twitter/the-algorithm/tree/main/follow-recommendations-service>).

System Overview

Our account recommendation system helps users with little familiarity with X easily and quickly discover new accounts to follow or subscribe. It leverages various user signals and algorithms to provide personalized account recommendations. The overview of the system is illustrated in following diagram: Several of our services are powered by the account recommendation system including, for example: the home timeline, account profile page, cluster follow, Connect tab, new user signup flow, promoted accounts, and relevant people.

System Overview

The account recommendation system, which powers several of our services (including, for example, home timeline, account profile page, cluster follow, Connect tab, new user signup flow, promoted accounts, and relevant people), consists of the following steps:

Candidate Generation

The system leverages various signals to generate account candidates that the target user (i.e., the user who is viewing the module) might be interested in. (See the "Signals" section below for more information.) All candidates are generated from those signals.

Candidate Blending and Filtering

After generating candidates from various candidate sources, the system down-samples from each candidate source based on their historical performance, and blends the selected candidates into a candidate pool. Then the system filters out candidates using some signals to ensure quality and health of the account recommendations.

Candidate Ranking

By utilizing various signals from the target user and candidates, the system ranks candidates based on the likelihood of the candidate being followed and positively engaged by the audience. (See the "Signals" section below for more information.)

Signals

This section describes the list of signals leveraged in the account recommendation system:

Signal Name	From	Description	System Step
User State	Target User, Candidate	⌘ internal defined user state based on daily login frequency and daily post frequency.	Ranking
Language	Target User, Candidate	Preferred language selected by user	Candidate Generation, Ranking
Geo info (Country, IP address, non-precise geolocation)	Target User, Candidate	Non-precise geolocation information derived from IP addresses.	Candidate Generation, Ranking
Client	Target User	Client type (e.g. iPhone, Android, Web, etc)	Ranking
Days since signup	Target User	Time since user signup	Ranking
Phone book	Target User, Candidate	Phone book contacts	Candidate Generation, Ranking
Email book	Target User, Candidate	Email book contacts	Candidate Generation, Ranking

Interests	Target User	Followed interests (topics)	Ranking
Follows	Target User, Candidate	Followings and follow actions	Ranking
Unfollows	Target User, Candidate	Unfollow actions	Ranking
Post created	Target User, Candidate	Post creation actions	Filtering, Ranking
Like	Target User, Candidate	Post like action	Candidate Generation, Ranking
Don't like	Target User, Candidate	"Not interested in" feedback and un-like actions	Ranking
Repost	Target User, Candidate	Repost action	Candidate Generation, Ranking
Quote	Target User, Candidate	Post quote action	Ranking

Mention	Target User, Candidate	Mention action	Candidate Generation, Ranking
Profile view	Target User, Candidate	Profile view action	Candidate Generation, Ranking
Post impression	Target User, Candidate	Post impression	Ranking
Post click	Target User, Candidate	Post click action	Candidate Generation, Ranking
Photo expanded	Target User, Candidate	Photo expand action	Ranking
Who-to-Follow module impression	Target User	Impression on the Who-to-Follow / Who-to-Subscribe module	Ranking
Push notification open	Candidate	Push notification open action	Ranking
Notification tab click	Candidate	Notification tab notification click action	Ranking

Mute	Target User, Candidate	Account mute action	Ranking
Block	Target User, Candidate	Account block action	Ranking
Report	Target User, Candidate	Post report action	Ranking
Display location	Target User	Where the account recommendation module is (e.g. home timeline, profile page, etc)	Ranking
Creator (subscription) eligibility	Candidate	Whether eligible for creator subscription	Ranking
Login days	Target User	Days since last login	Filtering, Ranking
Health label	Candidate	Health label (e.g. NSFW) and score generated by the Health team	Filtering

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